1. INTRODUCTION

1.1. Scope

This document covers any needs LIAP requires for the existing distributor, critical/major supplier, special process provider, various supplier, and service provider.

1.2. Application

The present document constitutes a contractual obligation when it is referenced on orders or purchase contracts.

The acceptance by the supplier of a contract which specified the application of the present document is considered as acceptance of its contents. Any potential drift from application has to be the object of a signed agreement jointly by LIAP and the supplier

1.3. Objectives

Aims of this document are to define the quality requirements applicable to LEACH INTERNATIONAL ASIA PACIFIC (LIAP) suppliers. Particular requirements, complementary to this document, can be notified on purchase orders.

2. APPROPRIATE DOCUMENTS

2.1. LEACH DOCUMENTS

Reference	Title / designation
/	None

2.2. LIAP DOCUMENTS

Reference	Title / designation
QM-0000001	Quality Manual
PR-0000006	Procedure for Purchasing
PR-0000020	Procedure for First Article Inspection
PR-0000004	Procedure for Product Change Management

2.3. LIE DOCUMENTS

Reference	Title / designation
CQ000006	Quality clauses applicable to suppliers

2.4. REFERENCES

Reference	Title / designation
AS9100	Aerospace Quality Management System
ISO9001	Quality Management System
AS9130	Quality Management System, filing of document
AS9102	Quality System, First Article Inspection
AS9103	Quality System, Variation management of Key Characteristics

3. DEFINITION

Products:
Materials (equipments, parts, components), products from process with continuous character (raw materials, liquids, sheet steels, thread), software (programs, data, procedures), services (transport, test….).

Supplier:
Organization (manufacturer, sub-contractor, distributor) holder of an order or a purchase contract form LIAP.

Manufacturer:
Supplier making a product from requirements or technical specification of LIAP's needs, and holder of an order or a purchase contract form LIAP.

Sub-contractor:
Supplier making a product from definition and/or manufacturing file from LIAP, and holder of an order or a purchase contract form LIAP.

Distributor:
Supplier doing the purchase, the storage and the sale of products without transformation and holder of an order or a purchase contract from LIAP. In the present document, a manufacturer insuring the distribution of his products following a catalog is considered as a dealer.

Sub-contractor:
Organization who provides a product to the supplier (rank n-2), holder of an order or a purchase contract from LIAP.

Special process:
Process whose results cannot be completely verified by a control or a non-destructive test and/or for which the deficiencies can appear after product use.

Supplier categories:

Category 1: Critical supplier (Manufacturer, Sub-contractor)

Category 2: Major supplier (Manufacturer, Sub-contractor)

Category 3: Distributor

Category 4: Various (Concerns products that are not in production and not included in inventory)

Category 5: Service providers

4. SUPPLIER GENERAL OBLIGATIONS

The supplier has the obligation, toward LIAP, to deliver products or services according to the technical requirements and to the clauses stipulated on the order / purchase contract on the notified delays.

This obligation of result also concerns the products that the Supplier would subcontract to another party.

Best engineering practices.
The supplier has to establish and maintain a Quality System Management of the adapted to products concerned by the order / contract and insuring to LIAP.
The delivered product will be complying with the contractual requirements.
The supplier has to introduce a continuous improvement quality process of its processes and its products.

Every change:

- within the supplier organization (example: change of manufacturing place, change of manager,…),
- of infrastructure (removal, change of ERP, …),
- of manufacturing conditions validated by LIAP (operations sub-contracted on a manufacturing procedure…) should be controlled.

To do it, the supplier will have to define and apply the necessary measures to maintain the quality of the product (quality plan, transfer plan, risk analysis, FAI). These elements must be forwarded to LIAP before the effective implementation of the modifications.

The supplier has to take measures to guarantee the safety of its installations, storage places and logistic means and computing in order to guarantee the contract completeness.
The Supplier commits to communicate to the Purchase Department of LIAP, as soon as he has knowledge of it, the obsolescence and modification notification of products bought by the supplier.

No modification of the physical or functional characteristics, in particular change of component, material, imposed manufacturing process, or imposed control process, can be introduced by the supplier on the products of LIAP definition without the prior written agreement of the Quality Department of LIAP. LIAP shall ensure where required that both the organization and all suppliers use customer-approved special process sources.

The supplying by LIAP of tools, manufacturing documents, control means does not relieve the supplier of its responsibility about the supply conformity.

The main characteristics of the process must be identified and monitored in an appropriated way to insure the supply to LIAP of a product in accordance with the specified requirements

The supplier makes a commitment to indicate to the Purchase Department of LIAP, as soon as he has knowledge of it all events or defect susceptible to reconsider the contractual delivery date and/or the conformance of the supply.

In case of return of non-compliant products, the supplier makes a commitment to communicate within 24 hours to the Logistic Department, the delivery date of these products after setting in conformity.
LEACH INTERNATIONAL ASIA PACIFIC reserves the rights to charge all or any of the non-quality costs resulting from non-conformity attributable to the supplier.

5. LEACH INTERNATIONAL ASIA PACIFIC INSPECTIONS

LIAP representatives, if necessary accompanied with third person (customers, official Services) can performed audits or supervising actions at the supplier to verify:

- the conformity of the supplier quality system regarding requirements of the present document
- the conditions of carrying out of the order
- the dispositions implemented after requested corrective actions.

LIAP reserves the right to control at the supplier location (and if necessary of his sub-contractors) that the product is conformed to the specified requirements by the order.

6. REGULATORY AUTHORITY INSPECTIONS

According to the nature of the ordered product or the ordered services, regulatory authority may carry out a supervising on all the operations related to the execution of the order.
Regulatory authority inspections (depending the supplying type):

Require access to all facilities involved with the production of any product for aerospace / aviation application. This includes access to Qualification Testing (conformity inspection of test articles, test set up and test witnessing), production process inspection, organization approval, authorized release certificate Compliance inspection and reporting of failures, malfunctions and defects

The supplier and his possible sub-contractors, have to insure the Regulatory authority, the free access to their installations, to any document related to the order realization and any opportunities allowing them to perform their mission.

7. SUPPLIER QUALITY SYSTEM

The supplier has to implement a coherent Quality system, adapted to its designed products, manufactures or sells to LIAP according to reference listed in par. 2.5.

7.1. PO CONTENT REVIEW

Applicable for supplier cat 1-5:

PO Content review activities have to take into account the respect of required delivery delays and specified requirements.
It is up to the supplier responsibility to verify, for each order, the validity of the documents issues in ownership of the supplier, notified on the purchase order.
The possible requests of LIAP original documents (drawing, specifications…) necessary to perform the order are to send to the Purchase Department of LIAP.

Only the specifications notified on the purchase order are contractual. The use of other specifications stay of the supplier responsibility, and cannot be used as documentary evidence as for the contestation by the supplier of a non-conformity.

The supplier has to obtain under his own steam the documents which are not property of LIAP (example: standards, regulations), necessary to perform the order, directly with the broadcasting organization of these documents

7.2. PURCHASE

Applicable for all supplier cat 1-5:

LIAP can impose / authorize supply sources. In that case, the authorized supply sources are specified on the order / contract or documents called by the order (list, subcontracting file.).
The supplier has to reflect to his sub-contractors the quality requirements of the present document which concern them as well as the requirements relative to the main characteristics and to control their respect.

The special process operation can be subcontracted:

- either to sub-contractors having facilities qualified by LIAP.
- or to sub-contractors having facilities qualified by the supplier.

And all implementation must be identified and qualified by LIAP.

7.3. SUPPLY AND SUB-CONTRACTING

Applicable for supplier cat 1-2:

7.3.1. Supply Of Raw Materials

For the raw materials supplies, the supplier has to hold or to have access to the minutes of chemical analysis and mechanical test according to current standards. The supplier must be able to transmit these documents to LIAP on simple request.

7.3.2. Products Provided By LIAP (assembly kit, in agreement with the supplier or according to agreements)

Within the framework of an order or a contract, LIAP can give in to the supplier all or any of supplies necessary to perform the order.

The supplier makes a commitment to use in that case only these supplies, their replacement by quite other equivalent which can only be made with the written agreement of LIAP. He also makes a commitment not to use these supplies for other customers, except written agreement from LIAP.

From receipt of supplies from LIAP, the supplier will have to implement and guarantee a level of traceability identical to a bought supply and in accordance with his quality system.

LIAP can provide manufacturing means and/or control and test means within the framework of the order execution.

These means will remain the property of LIAP. The supplier has to insure their identification, to maintain them in good condition, according to the modalities between the parties, and to inform the Purchase Department in writing about any wear or deterioration.

Within the framework of a control or test means, the supplier will have to make sure of the validity of the control means.

Operating procedures will have been agreed with LIAP.

7.4. TRACEABILITY

Applicable for supplier cat 1-5:

The supplier must trace all products manufactured from the same batch of raw material or from the same manufacturing batch to the delivery of those same products at LIAP.
The supplier must trace its components to the assembly and next to the higher assembly.

7.5. FIRST ARTICLE INSPECTION

Applicable for supplier cat 1-2:

A First Article Inspection must be performed and formalized for the following cases:

- first serial production product delivered,
- after a production break upper to 24 months,
- after a modification or an important change the manufacturing process,
- after a redoing / major modification of the tools,
- during a schedule change
- during a change of manufacturing location
- if requested by LIAP.

The formalization must be performed according to the standard AS9102, the LIAP support referenced on the order must be used for that purpose.

LIAP reserves the right to delegate the First Article Inspection, or to perform a final inspection on the manufacturing location. The choice which stays of the responsibility of the LIAP Quality Department will be formalized on the purchase order.

The validation of a First Article Inspection is from the responsibility of the LIAP Quality Department. As such, within the framework of a First Article Inspection delegate, the delivery of the parts will be effective when the First Article Inspection report sent by the manufacturer or subcontractor to the transmitter of the order will have been validated by the LIAP Quality Department.

7.6. INSPECTION DELEGATION

Applicable for supplier cat 1-2:

LIAP gives the possibility to formalize a couple "product / supplier" in inspection delegation. This approach is carry out in partnership with the supplier.
The supplier will have to make sure and prove that his manufacturing and control process is secured. The supplier will have to be able to supply to LIAP for each delivery the documentary proofs of conformity, agreed, within the framework of the inspection delegation, with the supplier quality department of LIAP.

7.7. CONTROL OF THE NON-CONFORMING PRODUCT

Applicable for supplier cat 1-5:

The non-conformities detected by the supplier and subject not to generate a rejection from LIAP have to be the subject of a concession before delivery with proposal of corrective action.

If the concession is accepted by the LIAP Quality Department, the supplier should:

- notify on the delivery documentation (Certificate of conformity, delivery note…) the reference of the accepted concession
- Attach the validated concession to the delivery documents.

Note: a not validated concession joined with the parts will not be taken into account and will be the subject of non-conformity treatment.

The drift detected by LIAP (in reception, integration, use), will be the subject of a DMR, specifying the defect description and the treatment decision taken by LIAP.
All DMR will be sent by e-mail to the supplier. The supplier should have to set up immediately preventative measures on the manufacturing and stock work in progress. The supplier will have 48 hours to contest if necessary the DMR and/or send to the transmitter of the DMR any precision regarding the logistic modalities to be followed (number of RMA, carrier…). After this delay of 48 hours, the return process will be activated.

During the re-delivery of these conformed products, the supplier will have to make reference to the LIAP DMR on the delivery note.

7.8. CORRECTIVE ACTIONS

Applicable for supplier cat 1-5:

Within the framework of a DMR, the supplier involves himself to inform less than 3 weeks the implemented corrective actions to LIAP.
The supplier will have to use an "8D" tool to make the answers to the corrective actions requests.

The answers will have to be sent to LIAP quality representative, which will have to judge the efficiency of the implemented corrective action.

7.9. HANDLING, STORAGE, PACKAGING, CONSERVATION AND DELIVERY

Applicable for supplier cat 1-5:

The supplier will have to implement the necessary conditions for the conservation of the delivered product.

The manufacturing date of shelf life products and life span limited must be indicated on the packaging.
To the delivery date, the shelf life cycle must at least be equal to 80% of the maximal life cycle.
The delivery of products with a lower limited life cycle life will generate the product return.

7.10. RECORD CONTROL RELATIVE TO THE QUALITY

Applicable for supplier cat 1-5:

The supplier has to insure the distribution and the management of documents and data to his own suppliers.

The supplier has to archive elements giving evidence of conformity to the LIAP requirements, even in case of interruption of the purchase orders.
The filing durations will have to be compatible at least of the AS9130.

The record retention duration should be specified according to the following requirements:

- Law / Rules / Regulation
- Industry
- Product related standard & requirement
- Customer specific requirement

Unless otherwise no specific requirement, supplier shall maintain records which evidence their process and product(s) meet approved specification requirements. The applicable quality records will be maintained for 10 years from the date of shipment and shall not be destroyed without agreement from the LIAP. All related records shall be available for review and submitted to the customer and/or regulatory authority upon their request.
Log cards or Route card must be stored for 10 years.
All FAI and nonconforming material records will need to be retained for until termination of service life.
It concerns in particular: the log cards or route card, the measures or test reports, material certificate, non-conformity report, as well as any document concerning the manufacturing and the conformity of LIAP products.

The documents filed by the supplier must be, at any time, able to be consulted by LIAP.

7.11. CONFIGURATION CONTROL

Applicable for supplier cat 1-4:

If the supplier proposes standards different from those specified by LIAP, this one has to prove their equivalence and submit their application on products to the approval of LIAP which reserves the right to call the contract into question.
When LIAP modifies a document specified into the contract, the supplier has to renew a contract review.

Supplier shall notify LIAP at least 3 months in advance when major changes in key elements of supplier's manufacturing process (e.g. facility, sub-tier supplier, equipment, production process...) are planned.

7.12. DELIVERY DOCUMENTS

Applicable for supplier cat 1-5:

Except particular indications defined on the purchase order, all deliveries must be accompanied at least with following documents:

- Delivery note, referring to LIAP references as well as the issues notified on the purchase order.
- Certificate of conformity to the purchase order, referring to the definition reference or to the used specification with its version (issue or technical modification).
  And all other conformity documents requested on the purchase order or on the contract (ex: test minutes, control measurements…).
- Nonconformance records list
- Regulatory documents as applicable
- Test Report and/or Inspection report as applicable
- As Built Configuration List - Parts List (as required and defined in Configuration Management flow down documents). This is typically required on kits, assemblies and sub-assemblies and final product

The access to the accompaniment documentation must be possible without breaking the product packaging.

If products are electronic components, all the components of a same delivery have to be from the same manufacturing batch and do not have a manufacturing date upper to two years except agreement between both parts.